IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A system comprising:

a processor coupled to a vehicle;

a brake controller coupled to the processor;

a first range detector coupled to the processor and coupled to the vehicle, the first range detector adapted to wirelessly detect a range; and

wherein the processor executes instructions to operate the brake controller to selectively apply and release a brake of the vehicle based on a comparison of a deceleration profile with range data from the first range detector and a speed of the vehicle.

2. (Original) The system of claim 1 further comprising a transmitter coupled to the first range detector and a wireless receiver coupled to the processor.

3. (Original) The system of claim 1 further comprising a vehicle speed sensor coupled to the processor and adapted to provide the speed of the vehicle.

4. (Original) The system of claim 3 wherein the vehicle speed sensor is coupled to a transmission, a speedometer, or an engine electronic control module.

5. (Original) The system of claim 3 wherein the vehicle speed sensor includes a doppler radar sensor or a global positioning satellite (GPS) receiver.

6. (Original) The system of claim 1 wherein the vehicle speed sensor includes a wheel speed sensor.

7. (Original) The system of claim 6 wherein the wheel speed sensor is coupled to a trailer wheel or to a tractor wheel.

8. (Original) The system of claim 1 further comprising a Hall effect speed sensor coupled to the processor.

9. (Original) The system of claim 1 further comprising a second range detector coupled to the processor.

10. (Original) The system of claim 9 further comprising a third range detector coupled to the processor.

11. (Original) The system of claim 10 wherein the first range detector includes a radar sensor, the second range detector includes an ultrasonic sensor and the third range detector includes an ultrasonic sensor.

12. (Original) The system of claim 1 further comprising a vehicle direction detector coupled to the processor and adapted to provide a directional signal.

13. (Original) The system of claim 12 wherein the vehicle direction detector includes a Hall effect sensor.

14. (Currently Amended) A method comprising:

receiving distance data from a wireless range detector based on a distance between a vehicle and an obstacle;

receiving speed information;

generating an electronic correction signal based on a comparison of the distance data and speed information with a deceleration profile; and

modulating a brake of the vehicle based on the electronic correction signal.

15. (Original) The method of claim 14 wherein receiving distance data includes transmitting a wireless signal from the range detector.

16. (Original) The method of claim 15 wherein transmitting a wireless signal includes transmitting a wireless signal rearward of the vehicle.

17. (Original) The method of claim 15 wherein transmitting a wireless signal includes transmitting a wireless signal forward of the vehicle.

18. (Original) The method of claim 14 further comprising wirelessly transmitting the distance data from the range detector to a processor.

19. (Original) The method of claim 14 further comprising receiving vehicle direction data.

20. (Original) The method of claim 14 wherein receiving distance data includes transmitting an ultrasonic signal from the vehicle.

21. (Original) The method of claim 20 wherein transmitting an ultrasonic signal from the vehicle includes transmitting the signal rearward of the vehicle.

22. (Original) The method of claim 14 wherein receiving distance data includes receiving a reflected wireless signal.

23. (Original) The method of claim 14 wherein receiving speed information includes receiving data from a wheel sensor.

24. (Original) The method of claim 14 wherein receiving distance data includes receiving data from a wheel sensor.

25. (Previously Presented) The method of claim 14 wherein modulating a vehicle brake includes transmitting pulses to a brake valve.

26. (Currently Amended) A method comprising:

receiving speed information for a vehicle;

receiving obstacle information from a wireless sensor insensitive to speed, the sensor coupled to the vehicle;

determining a deceleration profile based on the speed information and the obstacle information; and

modulating a brake system of the vehicle based on the deceleration profile.

27. (Original) The method of claim 26 wherein receiving speed information includes receiving a signal from a data bus of the vehicle.

28. (Original) The method of claim 26 wherein receiving speed information includes receiving a signal from a speedometer, a wheel sensor, a global positioning receiver or a wireless sensor.

29. (Original) The method of claim 26 wherein receiving obstacle information includes receiving a wireless signal reflected from the obstacle.

30. (Original) The method of claim 26 wherein receiving obstacle information includes wireless receiving data from a sensor.

31. (Previously Presented) The method of claim 26 wherein modulating the brake system includes operating a hold valve.

32. (Previously Presented) The method of claim 26 wherein modulating the brake system includes operating a dump valve.

33. (Previously Presented) The method of claim 26 wherein modulating the brake system includes controlling a hydraulic pressure, a pneumatic pressure, an electrical potential or an electronic signal.

34. (Previously Presented) A method comprising:

receiving an electronic speed signal for a vehicle;

receiving an electronic direction signal for the vehicle;

receiving an electronic condition signal for the vehicle from a sensor insensitive to speed; and

modulating a brake system of the vehicle to restrict vehicle movement based on the electronic speed signal, electronic direction signal and the electronic condition signal.

35. (Previously Presented) The method of claim 34 wherein receiving the electronic condition signal includes receiving a signal corresponding to an open door, an open valve, or a raised hydraulic lift.

36. (Previously Presented) The method of claim 34 further including energizing the brake system when the electronic speed signal indicates that the vehicle is substantially stationary.

37. (Previously Presented) The method of claim 34 further including energizing the brake system when the electronic direction signal indicates that the vehicle is moving.

38. (Previously Presented) The method of claim 34 further including energizing the brake system when the electronic direction signal indicates that the vehicle is moving forward and the speed signal indicates that a speed is less than a predetermined value.

39. (Previously Presented) The method of claim 34 further including energizing the brake system when the electronic direction signal indicates that the vehicle is moving rearward.

40. (Previously Presented) The method of claim 34 further including receiving range data to an obstacle and wherein modulating the brake system of the vehicle to restrict vehicle movement includes modulating the brake system based on the range data.

41. (Previously Presented) The method of claim 34 wherein modulating the brake system of the vehicle includes executing an emergency stop procedure upon detecting a hazard.

42. (Previously Presented) The method of claim 14 wherein modulating the vehicle brake includes releasing the vehicle brake.

43. (Previously Presented) The method of claim 14 further including:

receiving a vehicle direction signal corresponding to a direction of wheel rotation of the vehicle; and

wherein modulating the vehicle brake includes energizing the vehicle brake when the vehicle direction signal indicates that the vehicle is moving forward and the electronic correction signal indicates that a speed is less than a predetermined value.

44. (Previously Presented) The method of claim 26 wherein modulating the brake system of the vehicle includes releasing a brake of the brake system.

45. (Previously Presented) The method of claim 34 wherein modulating the brake system includes releasing a brake of the brake system.